



THE HONOURABLE COMPANY OF AIR PILOTS
incorporating Air Navigators

Tel: +44 (0) 20 7404 4032
Fax: +44 (0) 20 7404 4035
office@airpilots.org
www.airpilots.org

DISCUSSION PAPER

Developing a Just Culture to achieve an effective safety focused Management System

Captain N Clutton BSc

NOVEMBER 2015

The Honourable Company of Air Pilots publishes Position Papers to convey its official opinion and policy on what often may be contentious matters. It also publishes Study Papers to provide guidance on a variety of aviation topics and Discussion Papers to inform public knowledge of often-contentious areas that remain the subject of debate within the Company's committees. Prior to publication, Position Papers and Study Papers are formally endorsed by the Court of the Company, its governing body, and therefore represent the Company's official stance or guidance on a given topic. However, Discussion Papers are not formally endorsed by the Court of the Company and therefore are not necessarily reflections of the Company's current or future policy.

Position Papers - official Air Pilot opinion on the matters concerned

Study Papers - helpful guidance notes on a variety of aviation topics

Discussion Papers - illustrate areas under discussion in the Company's professional committees and Working Groups. Discussion Paper contents remain the subject of debate and therefore are not necessarily reflections of the Honourable Company of Air Pilots' current or future policy.

© Honourable Company of Air Pilots. Complete papers or extracts may be used free of charge providing their origin is attributed to the Honourable Company of Air Pilots.

Introduction

EASA has identified culture as being crucial to the safety performance of an airline, and has incorporated this concept into ORO GEN200. In CAP 737, the UK CAA has used the term 'Just Culture' when describing best practice. However, a Just Culture by itself is not sufficient to enable a Management System (MS, previously SMS) to function as intended. In addition, the guidance and regulations provided by ICAO, EASA and the CAA also refer to other elements that make up a safety culture, and this has resulted in a lack of clarity.

This paper addresses these problems and the author (1) draws on his work with Bryony Lamb (2) in the field of patient safety. This work developed a total systems approach to support and sustain a safety orientated MS. Together they developed models and toolkits for leadership and inter-professional teams in the NHS and higher education, and that addressed the entire patient pathway from diagnosis to recovery in the community. The synergy of knowledge and experience from both the aviation and health care industries produced the developments outlined in this paper.

The paper briefly describes the history behind the evolution of a Just Culture and its limitations. It then proposes an Inclusive Safety Culture (ISC) that defines each element of the culture and how it integrates with a MS.

The ISC is focused on both the customer and the staff, and takes a holistic approach to the skills and behaviours required to make this work. The skills and behaviours are described using Strength Based Leadership, Inter-professional Working and the appropriate knowledge of Human Factors. The author shows how these behaviours and skills are integrated into the culture and the MS, and that all are complimentary. The ISC requires support from the very top and should be embedded in the whole organisation.

Though this work is primarily focused on Organisational Culture, the problems of Tribal / Ethnic and Unit culture are included within the context of the ISC and highlight the importance of effective Change of Operator CRM training.

This paper proposes a way ahead for developing a sustainable safety culture that will meet the needs of the EASA regulations for a Management System (MS).

1. Nick Clutton

Nick retired from flying in 2014, having operated B767, 757 and 737s for British Airways, Astraeus Airlines and Ethiopian Airlines. He has extensive experience in multi-crew training from Crew Resource Management (CRM) / Human Factors (HF) to Electronic Warfare (EW) and tactics development. He has been working with Bryony Lamb for over 10 years developing a patient focused culture, combining CRM/HF training and inter-professional teamwork development and collaborative practice within health care to improve patient safety. Nick is a member of the Technical Committee of the HCAP.

2. Bryony Lamb

Bryony's background is in health psychology and inter-professional learning and working. She is an experienced senior manager and educator, having developed and led inter-professional programmes within Higher Education, both undergraduate and postgraduate. Until recently she held an Honorary Principal Lecturer post at Kingston & St George's, University of London; and is a past Chair of CAIPE (Centre for the Advancement of Inter-professional Education) www.caipe.org.uk

Developing a Just Culture to achieve an effective safety focused Management System

Introduction

History has shown that the success of an organisation's financial performance and safety record is dependent on the culture of that organisation. Both ICAO and EASA have identified culture as being crucial to the safety performance of an airline, and this concept is implicit in the structure for a Management System (MS, previously SMS), as defined in EASA ORO GEN200 and the associated AMCs. In CAP 737, the UK CAA has used the term 'Just Culture' when describing best practice. However, a Just Culture by itself is not sufficient to enable a MS to function as intended. In addition, the guidance and regulations provided by ICAO, EASA and the CAA refer to other elements of an organisation's culture such as Open, Reporting and Non-punitive. At present, there appears to be a lack of clarity on the nature of the culture required to drive an effective MS.

This paper proposes a holistic, systems approach to a culture that will enable a MS to function effectively. The supporting behaviours, skills and knowledge required to establish and support both this culture and the MS are described. The author draws on his work with Bryony Lamb in the field of patient safety within healthcare.

The paper starts by briefly describing the history behind the evolution of a Just Culture and its limitations. It then proposes an Inclusive Safety Culture (ISC) that defines each element of this safety culture, including the Just Culture, and how it integrates with a MS. A model of the ISC is presented as a Culture House, with the customer and staff at the focus, enveloped by the ISC and supported by the MS, the design of which is consistent with the ISC. The behaviours of the staff are based on Strength Based Leadership (SBL) and Inter-professional Working and Learning (IPW and IPL), with all staff having an appropriate understanding of Human Factors (HF). This model then provides a total systems approach, a synthesis of these elements, to making an effective and safety orientated MS.

Culture

The origins of a Just Culture

A Blame Culture is the easy reversionary mode for Homo Sapiens in problematical situations. We have all both employed and been at the receiving end of this negative culture. This is as true in the work environment and as it is at home. The behavioural reaction to a Blame Culture is silence and cover-up. In summary, it is a repressive system that invites a downward spiral of risk and incidents, and is a major inhibitor on learning and safety.

The aim is to "park a Blame Culture" and replace it with something better.

The direct alternative to a Blame Culture is a No-Blame Culture, where an individual can make an error and admit to it through the reporting system without fear of retribution. This may appear to be an ideal situation for having a free and open reporting system, where all can learn from either their own mistakes or the mistakes of others. Its major weakness is that it leaves the blatant violator of SOPs to run amok without fear of reprimand. So a No-Blame Culture is not an adequate alternative.

The outcome of this dilemma was the Just Culture, which addresses the problem of the violator. Perhaps the biggest challenge for a Just Culture is that "justice has to be seen to be done". Should an element of the workforce perceive that a colleague has been unfairly treated, then the suspicion

may evolve that there has been a management reversion to a Blame Culture, with the subsequent behavioural response.

However, a Just Culture by itself is limited in that it does not necessarily imply that the organisation's culture will encourage openness, reporting, learning and informed use of the lessons learnt. On this latter point, there are many accident / near miss event reports where the conclusions and recommendations are not applied, each of which represents a missed opportunity to develop safer practice.

The Inclusive Safety Culture

The ISC is focused on both the customer and the staff, and takes a holistic approach to the skills and behaviours required to make this work. For the ISC to function effectively proactive support is required from the very top and this culture needs to be embedded throughout the whole organisation. The elements of the ISC can be shown in the following table:

Table 1 Inclusive Safety Culture

Element of safety culture	Characteristics
Open culture	<ul style="list-style-type: none"> • Staff feel comfortable discussing safety incidents and raising safety issues with both colleagues and senior managers.
Just culture	<ul style="list-style-type: none"> • Staff are treated fairly, with empathy and consideration, when they have been involved in a safety incident or have raised a safety issue.
Reporting culture	<ul style="list-style-type: none"> • Staff have confidence in the local incident reporting system and use it to notify managers of incidents that are occurring, including near misses • Barriers to incident reporting have been identified and removed: <ul style="list-style-type: none"> - staff are not blamed and punished when they report incidents - they receive constructive feedback after submitting an incident report - the reporting process itself is easy
Learning culture	<ul style="list-style-type: none"> • The organisation: <ul style="list-style-type: none"> - is committed to learn safety lessons - communicates them to colleagues - remembers them over time
Informed culture	<ul style="list-style-type: none"> • The organisation has learnt from past experience and has the ability to identify and mitigate future incidents because it: <ul style="list-style-type: none"> - learns from events that have already happened (for example, incident reports and investigations).

Source: Leadership for Safety: Implementing Human Factors in Healthcare www.patientsafetyfirst.nhs.uk and adapted from Lamb and Clutton 2010

To help an organisation achieve the characteristics of each of these elements of the ISC, it is important the following points are addressed.

- Open Culture

The biggest challenge is to establish trust so that all feel able to discuss and report without fear. This is unlikely to be achieved by use of CBT, e-mails and text messages. The training should be classroom based, with the training presented by “champions” of the culture. As with existing CRM training, delegates should be able to share their experiences, with the help of case studies, so that they then have ownership of the MS.

- Just Culture

The need for discipline is justified for deliberate, unwarranted violation of rules, but this route should only be used on rare occasions. In addition, any disciplinary action should be seen by all to be fair and appropriate – “Justice must be seen to be done”. Care should be taken in the way in which any disciplinary action is taken least it is perceived as either a reversion to a Blame Culture or too soft a line for the level of violation. This should be an area identified for the development training for managers. Appendix 1 shows a flowchart for the application of a Just Culture that was developed for the Royal Air Force by Defence Aviation.

- Reporting Culture

The level of reporting is a useful metric indicator of the robustness of the Reporting Culture. The confidentiality of the reporter should be respected and this willingness for staff to report is reflected in EASA regulations by the requirement for the “non-punitive” reporting of Discretion.

- Learning Culture

A supportive relationship between the ISC and the MS should help an organisation to establish processes so that the reporting system can be used to identify threats and develop avoidance and mitigation strategies. Without an embedded ISC, the MS is unlikely to function effectively.

- Informed Culture

The organisation learns from incidents, near miss events and reports, but does not keep them secret. The lessons learnt are applied to the organisation through changes to the SOPs and in Training Needs Analysis (TNA) for the development of the training syllabus.

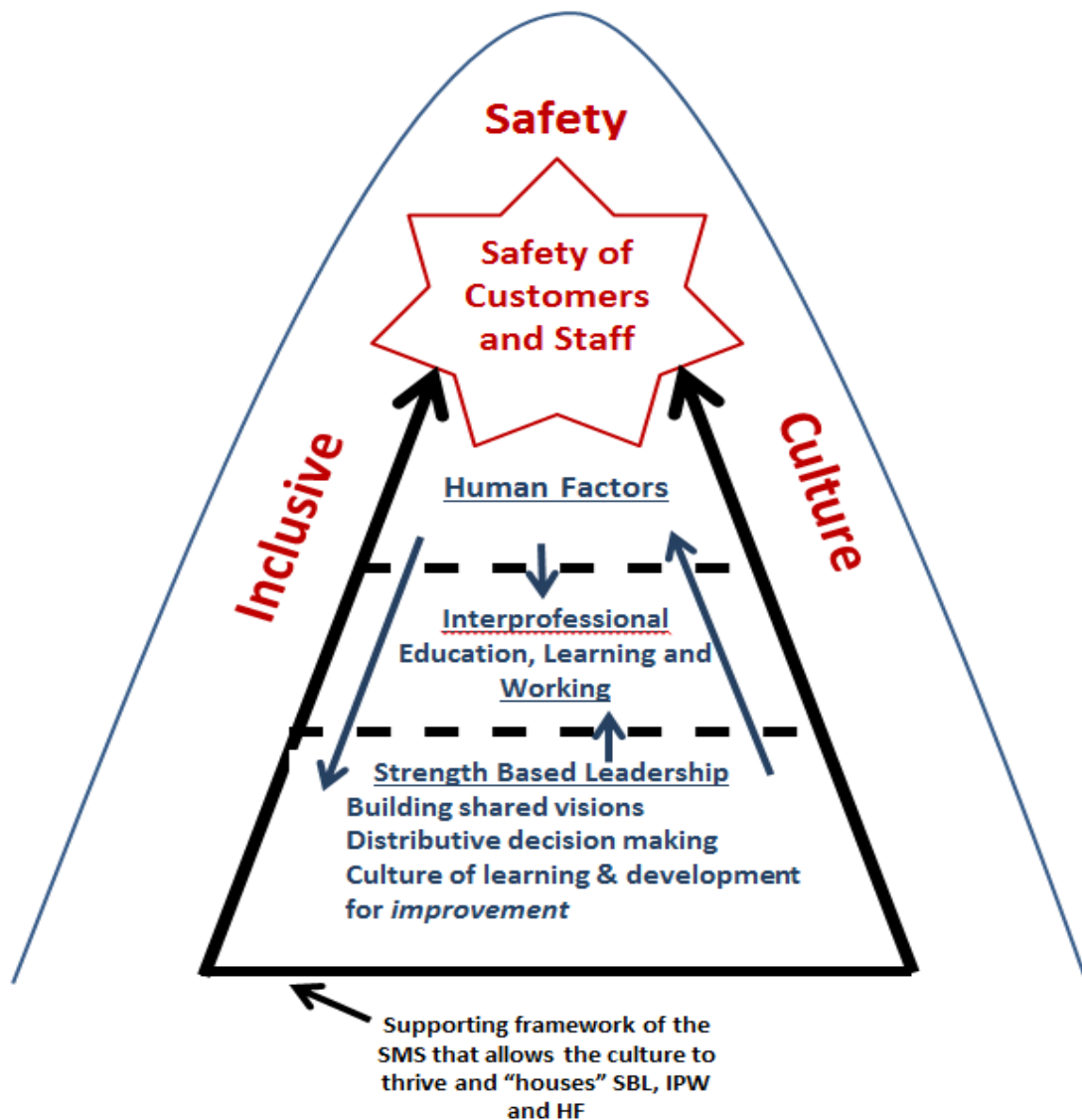
The Culture House and Management System

The ISC can be described as a Culture House, using the analogy of a private house, a family home providing a place of safety for the family. See figure 1. The location chosen is based on the environmental setting, be it either in a town or an idyllic countryside location. This environment can be likened to the ISC that envelops all. The family is the equivalent to the customer and staff. The structure of the house – the MS – needs to be in sympathy with the surrounding environment. A concrete and steel building would be out of place in a Cotswold village, as would a thatched cottage in the centre of London. An inappropriate structure can cause tensions with subsequent adverse consequences to the ISC. In a similar way, an organisation’s culture and MS need to be both integrated and complimentary for the MS to function effectively. The regulatory requirements for the structure of the MS are laid out in ORO GEN.200 and the AMCs, can be viewed as being similar to building regulations. They neither restrict the design of the MS nor inhibit its integration with the ISC. The MS is organic and can be developed by the organisation with the help of the Transformative Cycle of Improvement (TCI) toolkit, discussed later, that uses the principle of continuous quality improvement to establish and sustain the ISC.

The ISC and MS require appropriate behaviours to enable them to be functional and effective. These behaviours, by both leaders and members, are founded on Strength Based Leadership (SBL). The

way in which all the family (the staff) cooperate and communicate is manifest through Inter-professional Working and Learning (IPW and IPL). This ability to work together and to achieve tasks is enhanced with an appropriate understanding of HF. All of these subject areas are discussed next and require training.

Fig 1 The ISC viewed as a Culture House



Strength Based Leadership

To improve safety requires a whole systems approach, enabling an understanding of the nature of risk and the complexity of the interaction between the operating environment, the professionals and the customer (Reason, 2004). Accidents, error and potential risk can usually be attributed to many factors, not least the quality of senior management and whether it is committed to safety and how this is demonstrated within the workforce.

Safety culture and climate highlight the importance and contextual nature of leadership at all levels within an organisation. Flynn and Yule (2004) found that effective supervisors had more supportive and participative styles of leadership. They were more likely to initiate discussion on safety and provide positive feedback on safety issues as well as involving workers in developing safety interventions. This style of leadership is best described by using the Strength Based approach.

SBL promotes ownership of responsibilities, tasks and challenges by both leaders and team members. It is people centred, building on and developing the individual and combined strengths of their team

This leadership model uses a synthesis of Transactional, Transformational, Authentic and Appreciative Leadership to describe the strength based approach for leadership and membership skills. The change of the word followership to membership has been made because the member is expected to behave proactively within the team and organisation for the benefit of both (SBL and IPW), not just action the tasks assigned by the leader. Using a systems approach, Figure 2 identifies some of the characteristics of each of these leadership styles and their combined relationship within an inclusive safety culture. When used together, they provide a strength-based approach to leadership that harnesses the behaviours inherent in the ISC, and so enables organisations to achieve an effective MS.

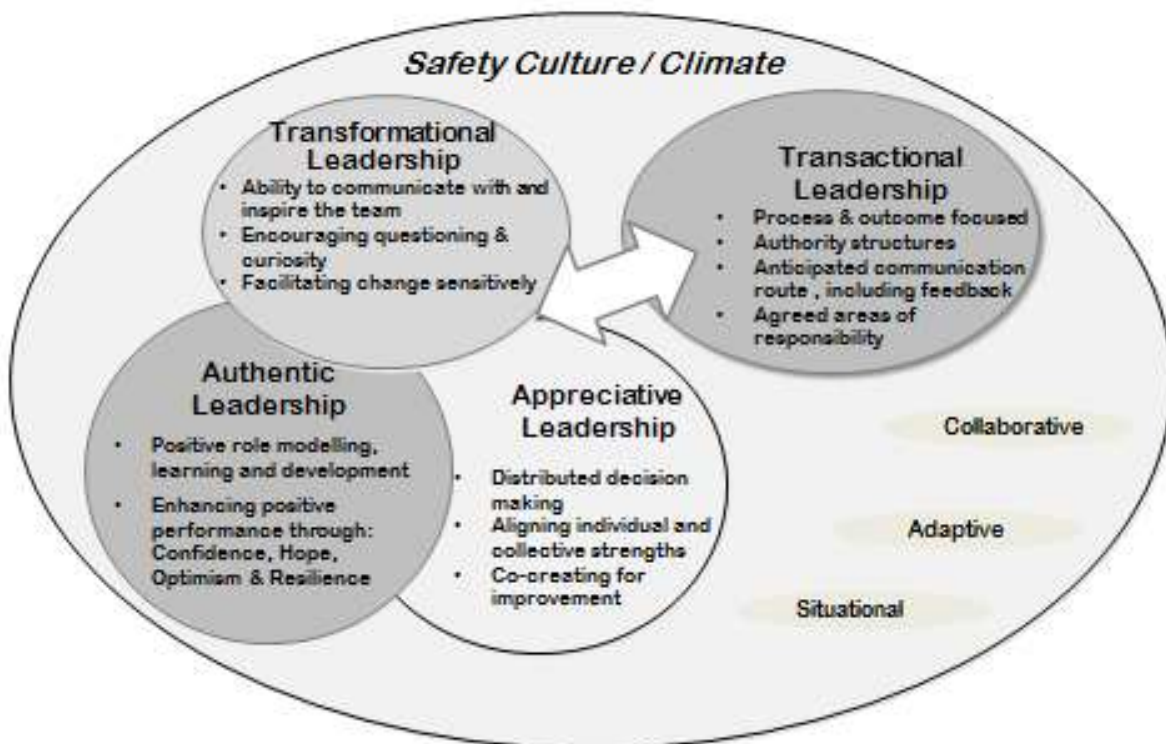


Figure 2 Proposed leadership underpinning an effective safety culture / climate

Transactional leadership can be regarded as the basis of all leadership, focusing on the transaction between the leader and team member, and is the means of establishing/creating management structures that will enable the tasks allocated to the organisation to be achieved. It is process and outcome focused. It provides a recognisable route for all members of the organisation to follow the principles of the ISC. However, transactional leadership needs to be used with the other three leadership styles and skills for the organisation to work effectively and improve safety.

In addition to transactional behaviours, leaders of high performance teams display transformational leadership skills, where more personally focused goals are replaced by team or organisational aspirations. Transformational leadership is the ability to communicate with and inspire the team to believe in the end goal and purpose of the task/team. This is an important behaviour for the team(s)

to employ so as to create a climate that supports all the elements of the ISC. It is the value of achieving the 'dream', building shared visions for safer practice, with each member of the team feeling ownership and taking on the responsibility to be part of the change, believing it is the only positive way forward. The focus is on innovation, encouraging questioning, creating a culture of learning, and empowering all members of the team to challenge and make changes to work together to improve practice and safety. Transformational leadership harnesses a positive and proactive approach by the team(s) that is a crucial part of the ISC.

Although there is some overlap with transformational leadership, authentic leadership is achieved through role-modelling self-awareness, transparent intentions, decisions and processes. Leaders build authentic relations, reflecting values and actions which lead to heightened levels of trust. Trust is an essential component that runs through the ISC, and is vital to establishing an effective reporting system. The focus is on valuing people and developing their strengths, avoiding negative mind sets, and this helps to unlock their potential to develop internal feelings of competence and self-effectiveness.

Self-effectiveness, Hope, Optimism and Resilience are key words within authentic leadership.

- Self-effectiveness is applied to the individual having confidence in their skills and technical knowledge, to understand risk and to report concerns and errors;
- Optimism, believing in the possibility of changing a situation and taking action in adhering to safety processes;
- Hope, is persevering in finding alternatives to improve the situation, finding new ways of working or using new equipment; and lastly,
- Resilience, seeking ways to overcome problems.

Together these states enable the individual and teams to avoid complacency and fatalism, whilst encouraging a desire to influence decision making and facilitate safety focused behaviour. Teams need resilience and positive thought processes, inherent in the behaviours that support the ISC, if they are to be able to continually develop the MS. This then places the organisation in a better position to tackle both existing and new safety issues.

Lastly, Appreciative leadership is included within this emerging leadership framework. Appreciative Inquiry (AI) is a strength-based approach for organisational change where employees and teams discover and develop together the best practice for improvement. Leaders facilitate shared visions for change, aligning individual and collective strengths, and so ensuring that decision making is distributed throughout the organisation. There are three Human Universals: to have a voice and be heard; be seen as essential to the group; be viewed as unique and exceptional with the emphasis on organisational learning, appreciating and anticipating success. This is an essential thread to the ethos driving the ISC in that makes it inclusive by encompassing all members of the organisation.

Within this leadership framework, the four elements of leadership should be considered as interdependent. Too often, only the transactional part of leadership is used, with ensuing difficulties and degrading of the team performance. This is evident in the Francis Report on the Mid Staffordshire NHS Foundation Trust (2013) where incidents of harm were the result of targets being a priority '*without considering the impact on the quality of care*' (Executive Summary, pg 65). The main skill is to take all people with you, at all levels within the organisation, from the cleaners to the CEO, to think about the big jump/change required, to take the team through the challenges and make the tensions creative. This was reinforced by the subsequent report on patient safety by Berwick (2013). SBL enables the teams to work in partnership to support an effective MS whilst embracing the ISC.

Inter-professional Working

The importance of team members from different professional backgrounds working together and learning from each other is crucial to the success of an organisation, as is the application of this principle to co-operation across teams. In the health care industry, this is known as Inter-professional Working (IPW).

This principle is readily adaptable to any risk industry and emphasises the importance of sharing expertise and removing barriers to working with others who have either different skill bases or are from different departments. This also enables decisions to be made with best available information. In the context of the Culture House, a barrier would be the equivalent of arranging the furniture such that access to another room is restricted. This may result in an individual or group:

- feeling isolated and kept apart,
- believing that decisions are being made without their input.

SBL drives the behaviours that encourage IPW and strengthens the effectiveness of both the ISC and the effectiveness of the MS.

Human Factors

The effectiveness of all these elements is further enhanced by the appropriate training of all staff in Human Factors (HF). Knowledge of HF enables teams, both members and leaders, to appreciate the root cause of errors, helps them anticipate an error, either by themselves or by another member of the team, and put in place avoidance and mitigation strategies.

An illustration of this would be the basic understanding of cognitive processing and mental models that can lead to disagreement and conflict between team members. Similarly, such understanding of cognitive processing will help every team member appreciate the human weaknesses that can lead to Confirmation Bias. This is as applicable to the commercial department as it is to operations and crew.

A further benefit of this knowledge is that if either a team member or leader makes an error and is “rescued” by another member or team, they will be less likely to take a defensive attitude. HF is an essential part of a “buddy – buddy” team behaviour. None of us intend to make errors, but we are all human and we all make errors.

Reason (2004) pointed out that the most experienced and highly qualified people are still vulnerable to making mistakes. He also pointed out that disciplinary actions and further training are not always the optimal solutions, even though they are often the most commonly applied. This illustrates why a holistic approach is required where skills embedded in knowledge of HF and SBL behaviours can help drive better outcomes within the MS and ISC.

Training

In their study of senior managers, Yule et al (2007) found that risk could be reduced in their organisations by investment in training. Not investing may have a negative effect with workers perceiving senior managers as not committed or interested in safety,

Knowledge and training also had a significant impact on the use of the safety system and the level of teamwork experienced. A study was carried out in Norway, Olsen (2010) to compare the safety climate between healthcare and the petroleum industry. The study found no significant

differences, but revealed that high levels of learning, feedback and improvement at the unit level are important across both sectors, inspiring work groups so that teamwork is enhanced and safety behaviour improves. It would seem reasonable to apply this thinking to aviation.

Toolkits to support the ISC

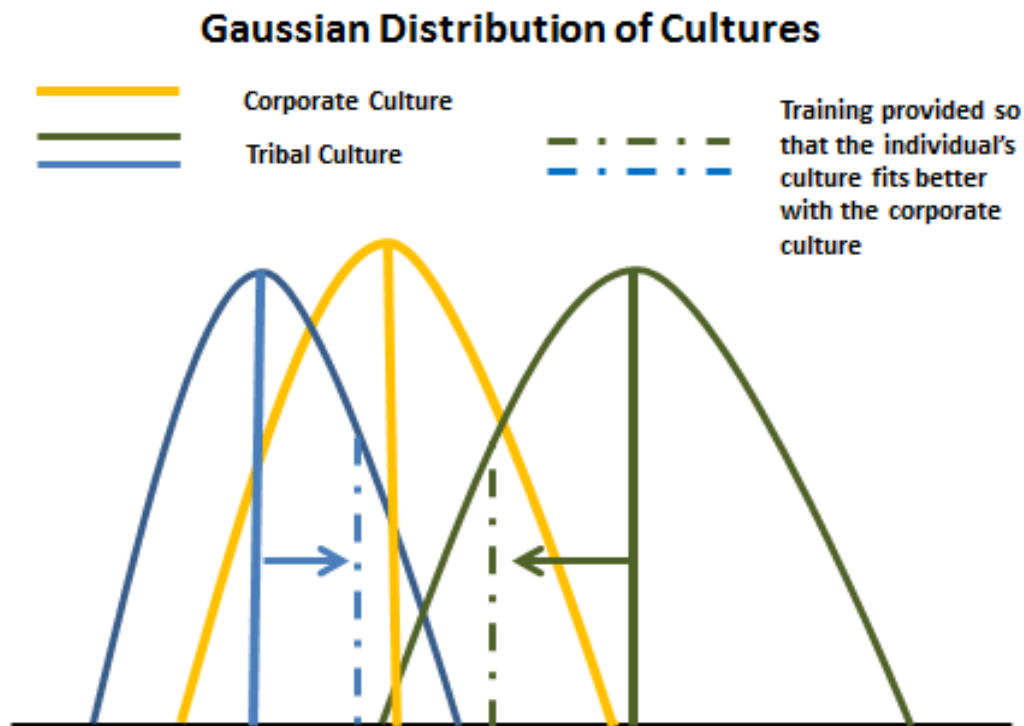
These Toolkits have been developed to help organisations establish and maintain/sustain the ISC, MS and staff training to develop the supporting skills required.

- The Transformative Cycle of Improvement (TCI) table This table was informed by the NASA Leadership / Followership aide memoire, and describes a decision making process that is iterative and is focused on team improvement and delivery of safe practice. It is a synthesis of the Continuous Quality Improvement (CQI) cycle of Plan, Do, Study, Act; the Appreciative Inquiry (AI) cycle of Discover, Dream, Design and Deliver; and the aviation decision making mnemonic of DODAR, Diagnose, Options, Decide, Allocate and Review. It not only provides a decision making framework for teams to use that is in harmony with both the requirements of a MS and the ISC, it also provides guidance for leaders in taking their team through the improvement process and for identifying skill gaps. This table is shown in Appendix 2 (adapted from Lamb and Clutton 2010).
- Leadership and Membership Skills Toolkits. These toolkits are based on SBL, go hand-in-hand with the TCI table, and help support both the Culture house and an effective MS. The grids identify appropriate skills and provide questions for leaders, members and the organisation to ask to assess whether team members and leaders operate effectively. Thereby the teams continually seek to improve their own performance as well as that of the organisation. The Leadership Toolkit is shown at Appendix 3 (adapted from Lamb and Clutton 2014). This toolkit can be used in conjunction with the TCI either when addressing a task, during reflective learning following either an incident or near miss event, and during facilitative training using case studies. The Organisational Management **and** Membership Toolkit at Appendix 4 follows similar principles to the Leadership grid, but also addresses considerations for the Organisation and its role in supporting both team leaders and members within the various facets of the ISC.
- Audit Toolkit. Extracts from the Audit Toolkit are shown below in Appendix 5. The questions and outcomes may be used to confirm that the organisation, team leaders and members are operating within the guidelines of the Culture House supporting an effective MS. This toolkit can be used either internally by the organisation, or by an external inspectorate.

Tribal Culture

Tribal cultures range from ethnic identities, through football clubs to the airline industry. Each has qualities that may be unique and have their own excellence. These aspects can be harnessed within the ISC for development and improvement of the organisation. There may be other aspects of a particular culture that need to be parked if the individual is to assimilate into the team and become an effective member. One of the objectives of the Operators Conversion CRM Course is to provide this training Fig 3.

Fig 3 One objective of an Operator Conversion Course



Some of the challenges that tribal cultures present include:

- Rivalries and distrust.
- Past experiences that drive strong behavioural responses.
- The fear of “responsibility” that is associated with automatically being blamed if something does not work out as planned.
- Deeply ingrained respect for elders.
- Deferring all decisions to higher authority.
- The importance of both family and honour.
- Potential conflicts between Mono-chronic and Poly-chronic approaches to time. This is where there is a potential for conflict between those who work to a finite time-line (mono-chronic), and those who regard time as flexible. For example: when a person from a poly-chronic background meets a relation, time can flex for a conversation, but when they arrive late for a meeting / task, they do not perceive themselves as being late (poly-chronic), Schneider and Barsoux (2003).

Tribal Cultures emerge in the area of fatigue Risk Management as is illustrated by this quote from the report by Dr Nasim Zaidi Committee for the Indian CAA (New Delhi-110003 July 15, 2009) when discussing the issues raised by providing a regulatory system that traverses a range of Tribal / Ethnic cultures :

- “the Committee, therefore, worked extensively on formulating numbers for flight time duty period and rest time requirements suitable for Indian conditions and culture”
- In addition, ICAO documentation does not provide any values for prescriptive limitations because “differences of culture between States can lead to different perceptions as to what is acceptable, and what is not”.

This could be interpreted as indicating that not all humans are equal in their vulnerability to making fatigue related errors.

EASA law requires a standard Corporate Safety Culture applicable to all operators, regardless of their employees' ethnic background.

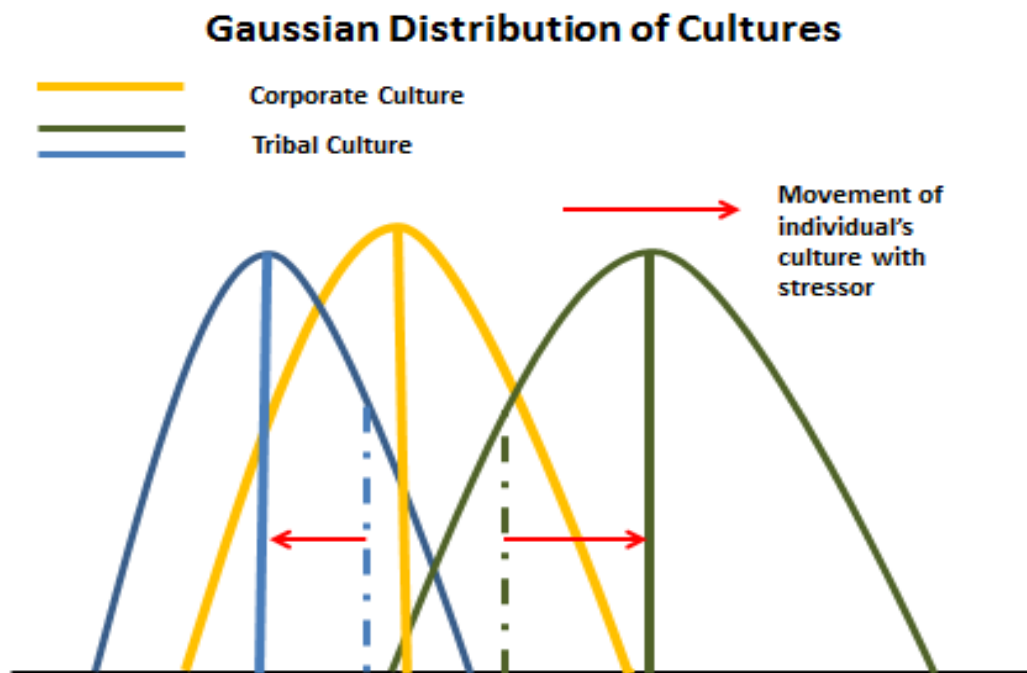
Denial by the organisation that these challenges exist may:

- Generate latent problems;
- Increase not diffuse tension;
- Result in teams having hidden sub divisions which reduce cohesiveness.

Once an organisation accepts that training to address such challenges is needed, then the concepts and principle that drive the ISC as illustrated through the Culture House, can be used to resolve the behaviours. Those undergoing the training will need to accept the ICS as the corporate culture and that there is no fear of unjust reprimand, blame or loss of face/honour. In addition, the organisation will understand the potential for language difficulties, and have the training and SOPs to help avoid language having a contributory input to errors.

One of the objectives of the training should be to enable either a team member or leader to appreciate the importance of rescuing another member of the team if a stressor causes a reversion to previous culture. As importantly, the individual being rescued must realise that the team are acting for that individual's good as well as that of the team. This is an expected behaviour by those operating effectively within an ISC.

Fig 4 Reversion under Stress



Unit Culture

Same principles used in addressing Tribal culture apply to Unit cultures that may emerge and endanger the cohesiveness of the organisation. This may be triggered by a group's natural individuality, such as IT or engineering where both thinking and language may set them apart.

The development of divisions into units that have their own identity and culture can also arise in a large organisation, and is an HF response to the human need to be in units of up to 150, and must be

less than about 200, Dunbar (1992). This is one of the reasons for the regimental system in the British Army.

Another trigger could be the feeling of marginalisation. This can be illustrated with engineers in that they are omitted from the Fatigue Risk Management requirements detailed in ORO GEN.200 that provide crews, schedulers and certain managers with training in this subject. Yet there are incidents where safety issues can be partly attributed to engineer fatigue. This exclusion from FRM training and regulation could send a message that the engineers “don’t count” as people in the safety culture.

All of these HF driven challenges can be counterbalanced by effective use of SBL and IPW, along with appropriate training.

Conclusion

For a Management System to be effective, the organisation should have ownership of a culture that supports the whole safety system. The ISC provides such a culture. The teams within the organisation should demonstrate SBL and IPW behaviours. All staff should have a relevant understanding of HF. This is outlined in the model of the Culture House and employs a holistic systems approach that is focused on the safety of both the customer and the staff. The Culture House is an organic system that is able to be developed with the help of skills Toolkits.

A more extensive description of SBL and its relationship to IPW, HF and the ISC, can be found in Lamb & Clutton 2010 and 2014.

Though this paper is primarily focused on Organisational Culture, the problems of Tribal / Ethnic and Unit culture are included within the context of the ISC and highlight the importance of effective Operator Conversion CRM training in support of the ISC.

Not only does this approach meet with the spirit and letter of EASA regulations, it is also supported by the findings of both the recent Francis report and the follow up report by Berwick into the failures of the Mid Staffordshire NHS Foundation Trust – arguably a higher risk industry than aviation.

This Culture House model, which illustrates the ISC, offers a way ahead to improve effectiveness of an existing Management System and so the safety of the organisation.

Appendices:

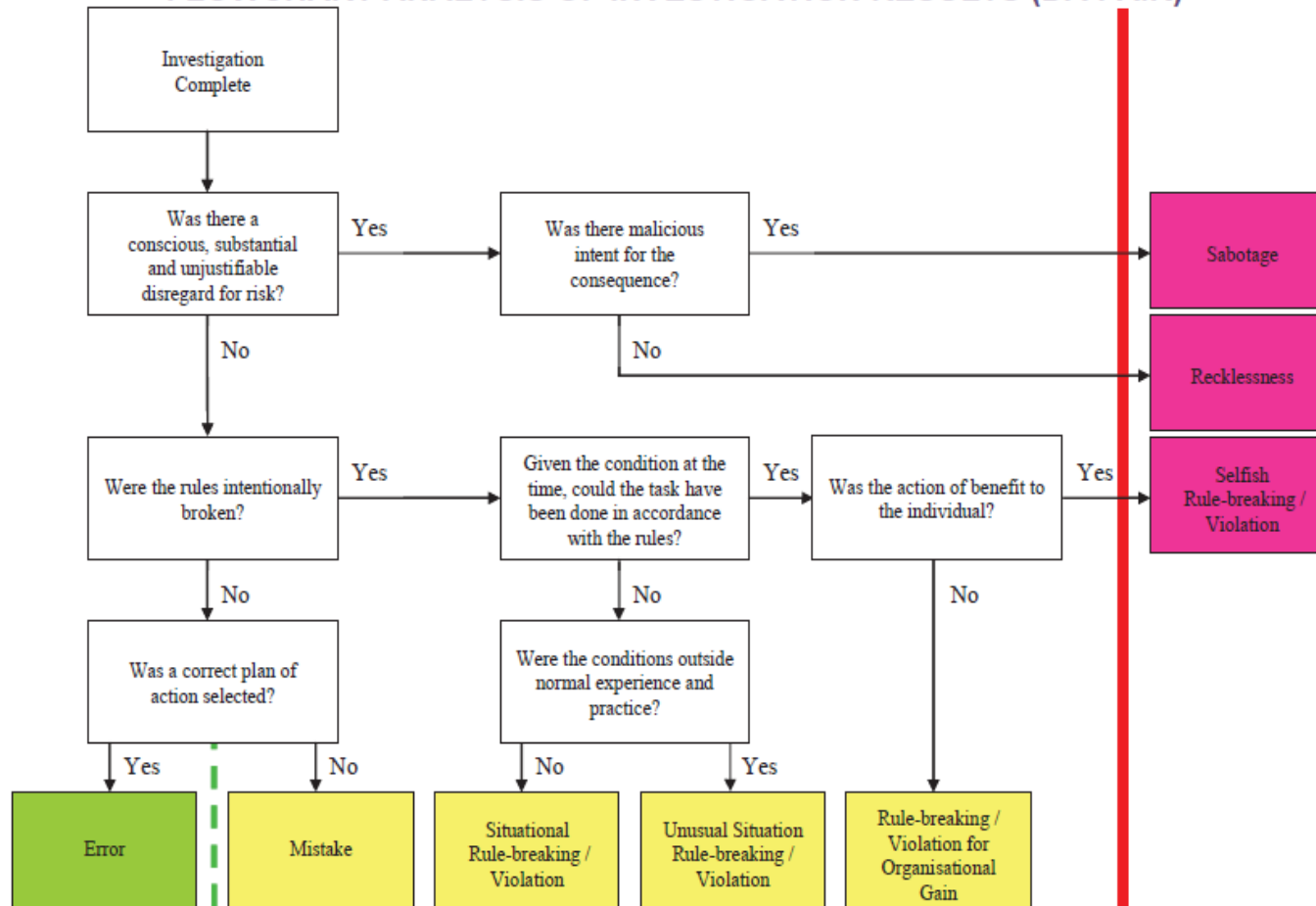
1. Defence Analysis Flowchart of Analysis of Investigation Results DA FAiR
2. The Transformative Cycle of Improvement
3. The Leadership Toolkit
4. Organisational Management and Membership Skills Toolkit
5. An Extract from the Audit Toolkit

References:

- Berwick Report (2013) A promise to learn – a commitment to act.
Improving the Safety of Patients in England. National Advisory Group on the Safety of Patients in England. Executive Summary, p5; p 10, Crown copyright, 2901213.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/226703/Berwick_Report.pdf
- R I M Dunbar
Neocortex size as a constraint on group size in primates.
Journal of Human Evolution (1992). Vol 20, pp 469 to 493
- Francis Report (2013).
Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry. Chaired by Robert Francis QC, February 2013, Executive Summary, and Volume 3: Present and Future Annexes, London: The Stationery Office.
- Flin, R. and Yule, S. (2004). Leadership for safety: industrial experience.
Quality & Safety in Health Care. 13, 45-51.
http://qualitysafety.bmj.com/content/13/suppl_2/ii45.full.pdf
[Retrieved 2011.](#)
- Lamb, B. and Clutton, N. (2014) Leadership development for inter-professional teams to drive improvement and patient safety.
In *Leadership development to Inter-professional education and collaborative practice.* Eds Forman, D., Jones, M. & Thistlethwaite, J. Palgrave Macmillan.
- Lamb, B., Clutton, N., Carson-Stevens, A., Panesar, S. & Salvilla, S. (2014) Strength-based leadership for developing and sustaining inter-professional collaborative practice.
In *Leadership development to Inteprofessional education and collaborative practice.* Eds Forman, D., Jones, M. & Thistlethwaite, J. Palgrave Macmillan.
- Lamb, B. and Clutton, N. (2010) Crew Resource Management within inter-professional teamwork development: Improving the safety and quality of the patient pathway in health and social care.
Journal of Practice Teaching and Learning. 10(2) 4-27.
<http://essential.metapress.com/content/yq81h30738542j4n/>
- Olsen, E. (2010). Exploring the possibility of a common structural model measuring associations between safety climate factors and safety behaviour in health care and the petroleum sectors.
Accident Analysis and Preventio. 42, 1507-1516.
- Reason, J. (2004) Beyond the organisational accident: the need for “error wisdom” on the frontline.
Quality & Safety in Health Care, 13, 28-33.
- Schneider and Barsoux, (2003) *Managing Across Cultures,* p45, Prentice Hall, ISBN 0-273-64663-X
- Yule, S., Flin, R. and Murdy, A.(2007). The role of management and safety climate in preventing risk taking at work.
International Journal of Risk Assessment and Management. 7(2), 137-151.

Appendix 1. DA FAiR - Flowchart for the application of a Just Culture

CHAPTER 3 - APPENDIX 2 TO ANNEX C: JUST CULTURE CULPABILITY MODEL - DEFENCE AVIATION
FLOWCHART ANALYSIS OF INVESTIGATION RESULTS (DA FAiR)



DA FAiR v9 – May 10

Figure 6 - Just Culture Culpability Model - Defence Aviation Flowchart Analysis of Investigation Results (DA FAiR) (Part 1)

Appendix 2. The Transformative Cycle of Improvement

Stages in Cycle: PROCESS	CRM/HF skills that can be applied to the Processes <i>(Part of Leadership Skills Toolkit)</i>
Discover <ul style="list-style-type: none"> ● Involve the wider team <ul style="list-style-type: none"> ○ Together view the safety of the operation as a complex system ○ Identify what works well and why to build on best practice within system 	Leadership, Membership <ul style="list-style-type: none"> ● Understanding assertiveness and cultural variations both tribal and organisational ● Collaboration across boundaries without feeling of threat – the wider team ● Use of the Authority Gradient ● Identification and management of human factors
Dream <ul style="list-style-type: none"> ● Develop creative conversations for shared images to shape the future ● Identify changes that can be made that will result in improvement 	Valuing other teams & professions <ul style="list-style-type: none"> ● Valuing contribution from all ● Understanding limitations and safety implications if team confined by barriers
Design/Plan <ul style="list-style-type: none"> ● Work together to plan the future ● Prioritise ‘dreams’ ● Develop improvement plans ● Decide on outcome measures ● Decide how / know when improvement has been achieved 	Safety, situation awareness & error management <ul style="list-style-type: none"> ● Information acquisition and processing ● Ability to anticipate problems - active as well as latent ● Knowledge of standard procedures ● Situational awareness of self, team, environment and equipment ● Stress, fatigue and workload management
Deliver/Do <ul style="list-style-type: none"> ● Together, carry out plans, whole team taking ownership of process 	Communication and assertiveness <ul style="list-style-type: none"> ● Communication – between people, teams & organisations ● Appropriate means of communication – advantages and limitations
Review <ul style="list-style-type: none"> ● Review process ● Measure / evaluate impact ● Has it worked as expected? ● If not, why not? 	<ul style="list-style-type: none"> ● Reporting systems – the requirement for an open culture and non-defensive two-way feedback ● Ability for individuals and teams at all levels to challenge
Improve <ul style="list-style-type: none"> ● Change practice ● Disseminate across teams and organisations 	Decision making, briefing and debriefing <ul style="list-style-type: none"> ● Communication protocol ● Knowledge of procedures/rules ● Clear decision making processes ● Allocation of tasks according to ability and workload ● Regular review of outcomes ● Apply feedback loop to all involved.

(Adapted from Lamb & Clutton, 2010)

Appendix 3. Leadership Skills Toolkit for Teamwork Development, Improvement and Safety (Adapted from Lamb and Clutton 2014)

LEADERSHIP SKILLS	Questions for Leaders to ask
<p>Managing People/Colleagues - Team Climate</p> <p><i>Leaders responsible for the whole team having an understanding and ownership of:</i></p> <ul style="list-style-type: none"> • A strength based approach in maintaining an inclusive safety culture • The value of other professions’ roles, responsibilities, priorities, expertise and strengths and how these interface with their own • Methods of communication and their limitations <p><i>Leaders inspire and establish shared vision, and provide support and direction through:</i></p> <ul style="list-style-type: none"> • Free and open communication being practised; different views are sought and team members are encouraged and empowered to speak up • Acting decisively when required (appropriate use of the Authority Gradient) • Situation Awareness (SA), including own and team members workload and stress • Encouraging innovation and learning within team and organisation <p><i>Leaders model qualities in addition to those of a member:</i></p> <ul style="list-style-type: none"> • Build quality relationships within the team, building on individual and combined strengths, empowering members and developing team spirit • Confidence, Hope, Resilience and Optimism • Turn potential conflicts to advantage • Build team identity and commitment • Demonstrate sensitivity to other team members: mentor and develop their strengths • Set supportive tone and trust members to take decisions • Ask for help when appropriate 	<p>In assessing the team:</p> <ul style="list-style-type: none"> • Is the team committed to the values of the organisation, including valuing the strengths, roles and responsibilities of their colleagues? • Do members feel valued and supported by their colleagues and team leader? • Are team members objective, constructive and positive in their communication, including giving and accepting feedback non-defensively? • Are there any perceived barriers to open communication within the team? • Is the team comfortable working with a shallow authority gradient? • Do the team members work collaboratively, with those involved throughout the customer’s journey to achieve improvement? • Do team members monitor their own, the team leaders and other team members’ behaviour, stress and workload and offer appropriate support? • Does each member show a desire to develop and learn? <p>Leaders’ self-assessment:</p> <ul style="list-style-type: none"> • Have you created a climate in which members: <ul style="list-style-type: none"> ○ Are aware of the importance of personal commitment in managing risk and collaborative customer centred service? ○ Are encouraged and able to speak up and challenge? • Are you objective, constructive and positive in your communication, including giving and accepting feedback non-defensively? • Do you encourage team members to be innovative and achieve their potential? • How do you resolve any issues that arise from the above assessment?

<p>Service / Improvement Planning</p> <p>Aim to improve and maintain the quality and safety of the customer’s journey</p> <p><i>Leaders should:</i></p> <ul style="list-style-type: none"> • Establish goals/ objectives • Look for and understand long term underlying issues • Establish decision making processes for the task with the whole team • Value and use all resources / expertise / strengths • Delegate tasks and prioritise to avoid overload of individuals and to avoid key task conflict • Manage time effectively and plan times for reviews and checks • Assess risk and adopt strategies to reduce error, including reviewing quality of briefings, checklists, etc. with the team, for development as required • Prioritise task allocation for team members 	<p>In assessing the team:</p> <ul style="list-style-type: none"> • Do the team value others expertise and strengths as well as their own, in contributing to the planning for the task / improvement throughout the customer’s journey? • Are all members participating fully in the decision making process, using their strengths, skill and expertise appropriately to reduce potential error? • Do the whole team have a clear understanding of: <ul style="list-style-type: none"> ○ The objectives / goals and protocols of the task / improvement intervention? ○ The decision making process? ○ The roles, tasks and expectations of all members? • Do team members speak up and challenge decisions, even if it involves disagreement? <p>Leaders’ self-assessment:</p> <ul style="list-style-type: none"> • Have you been an active team member? • Have you used all resources, prioritised and shared the tasks efficiently? • Have you reviewed the planning and decision making process and taken action as required? • How do you resolve any issues that arise from the above assessment?
<p>Service Delivery – task / intervention</p> <p>Reflects the extent to which leaders have planned ahead, are maintaining situation awareness(SA), coordinating tasks and anticipating contingencies during the task:</p> <ul style="list-style-type: none"> • Continually integrating information and clarifying complexity - of the ‘Big Picture’; of team members workload, fatigue and stress; of equipment/technology used by the team, and then delegating as appropriate • Ensure communication strategy and decision making processes are clear • Participate in briefings and using checklists, aide memoires, etc. • Involve all team members in on-going assessment, decision making and review of outcomes • Test assumptions • Communicate regularly with higher management and other teams to maintain their SA 	<p>In assessing the team:</p> <ul style="list-style-type: none"> • Are the team following the established protocols within the safety culture? • Are the team continually assessing: <ul style="list-style-type: none"> ○ The SA of the team? ○ Potential risk? • Is open communication sustained within the whole team and members encouraged to speak up with concerns at any time? • Are the team continuing to value each other’s strengths, roles and responsibilities? <p>Leaders’ self-assessment:</p> <ul style="list-style-type: none"> • Do you help sustain a supportive, challenging and responsive environment including the testing of assumptions, and the extent to which a team member recognises the need to challenge and give and receive feedback? • Are you or someone else, monitoring the system status and informing the team? • How do you resolve any issues that arise from the above assessment?

Appendix 4. Organisational Management and Membership Skills Toolkit

Organisational management culture to support effective safety focused inter-professional teamwork	Membership Skills
<p>Organisation:</p> <p>To provide quality services through learning for improvement and increasing patient safety across an organisation, an Inclusive Safety Culture is required. This culture relies on strength based approaches being used by both leaders and members.</p> <p>Authority and accountability structures and communication processes underpinned by SBL support and inspire inter-professional teams to learn and work together for improvement. This creates a positive climate of innovation and creativity, embedding safety within every aspect of the organisation.</p> <p>Errors and potential conflicts are acknowledged and addressed by senior managers, to seek better ways to improve services and safety</p> <p>A shallow authority gradient is the accepted norm and is used across the organisation. Leaders are able to balance authority and assertiveness, while being accessible and <i>all</i> team members feel involved.</p> <p>Values <i>Learning and working together for improvement:</i></p> <p>The qualities of honesty, consistency, acting with integrity, being decisive, entrepreneurial and having the desire to inspire and include others will be valued by all, with the objective of improving both services and safety.</p>	<p>Inter-professional working / team climate</p> <p>This reflects the extent to which communication within the team is free and open and different views are sought by leaders, developing a positive climate of innovation and creativity, with safety and the quality customer experience as the primary aim</p> <p>SA of both the task in hand and the bigger picture is crucial for the effective and safe operation of a team. For this to happen, members need to understand methods of communication and their limitations. In addition, they need an awareness of how risk is assessed and monitored.</p> <p>Members identify and value the expertise of other team members, including the wider team – all those who are involved with the customer (cross agency working)</p> <p>Desire to develop and learn</p> <p>Leaders role modelling respect, openness, hope, confidence, and resilience, motivates and inspires the team. Through adopting these attitudes and behaviours, members will respect and support their team and the leader; they will also set a valuable example to other teams.</p> <p>Team members participate effectively within the team through:</p> <ul style="list-style-type: none"> • Understanding and valuing the different roles, responsibilities, priorities and expectations of all those involved with the customer. • Knowing when to engage and involve them in decision making: assessment, diagnosis, management of tasks, and improvement planning. • Communicating clearly and openly with colleagues / the whole team • Working proactively within the team: able to speak up to offer or seek information or direction and challenge, as appropriate

<p><i>Commitment</i>, from senior managers to establish and sustain customer centred practice and an Inclusive Safety Culture <i>Learning</i>, from accidents / errors and near misses embedded in organisation culture, inspiring staff at all levels to report, learn and work together for improvement</p> <p><i>Engagement</i>, of all concerned with customers and staff at the centre:</p> <ul style="list-style-type: none"> • The different expertise of members is recognised, valued and used appropriately through shared decision making, encouraging all to voice their views and ideas, as appropriate • Achieving a shared vision, through shared decision making <p>Consistent with these values managers will promote staff development to enhance the expertise and working of the team.</p>	<ul style="list-style-type: none"> • Maintaining own and team’s situation awareness of both task and individuals’ behaviour • Being objective, constructive and positive, as appropriate • Giving feedback at appropriate times • Accepting feedback non-defensively • Monitoring and managing workload and stress in self • Admitting overload and stress in self, recognising it in others including the leader, and being able to raise concerns <p>Face-to-face communication is preferred option. This accessibility is used by the leader to integrate information and clarify complexity.</p> <p>In addition, the leader values the contributions from members, and helps mentor and develop their potential. Quality relationships are built within the team.</p> <p>The leader encourages an entrepreneurial spirit so that not only are difficult decisions made, but with appropriate assessment, risks are taken where needed.</p>
<p>Process / Safety Management System</p> <p>Open, inclusive communication:</p> <ul style="list-style-type: none"> • Protocols are established for regular information sharing and development for improvement • Briefing procedures are designed to optimise the SA of the team. • Effective feedback loops • Staff are encouraged to challenge / raise concerns <p>Regular training in SBL, IPW and HF is used to enhance the SA and behaviours of all within the organisation to improve safety and the quality of the customer experience. Assess risk as part of daily routine and have a culture in place where any team member is free to voice concerns over risk.</p>	<p>Service Planning and Decision Making</p> <p>Goals reflect organisational goals, focusing on the quality of the customer experience and their safety at the core of each task</p> <p>Assess risk as part of a customer centred culture through maintaining Situation Awareness of whole system within context of assessing and planning customer centred care, including: equipment, environment, protocols / checklists, specific customer needs, team and self.</p> <p><i>Shared decision making is used to enable team members to contribute effectively.</i></p>

There is sensitivity for the need for a balance between stability and change. The TCI is used so that teams are able to initiate change and discuss how progress and outcomes will be monitored / reviewed, and who will be responsible for this. Across the organisation, team members reflect on the way the team is working, identify areas for improvement, plan Training Needs

Analysis, and implement change.

Service Delivery

Understand the importance of sustaining situation awareness in self, the team and the whole system

The ability of team members to contribute effectively to the team task:

- Sustain SA and open communication within the whole team e.g. potential problems are brought to the attention of the team and leader
- Help to sustain a supportive, challenging and responsive environment including the testing of assumptions e.g. feeling confident to suggest a course of action, even if it involves disagreement.
- Recognising when to give and receive feedback
- Share tasks efficiently and prioritise when appropriate
- Manage time effectively
- Identify training needs

There is proactive use of briefings, debriefings, checklists and aide memoires, as appropriate.

Appendix 5. Extracts from the Audit Toolkit for a Management System

Broad Questions	Deeper Question(s)	Outcomes	Sustainability
The Reporting System			
Does the reporting system match the Management System (MS)?	<ul style="list-style-type: none"> Is the number of reports from each team/department appropriate to the required skills, risks and their workload? Too few reports might indicate the resurgence of a Blame Culture in part(s) of the organisation. 	<ul style="list-style-type: none"> If there is doubt or lack of confidence in the system, has appropriate training been provided for those teams? 	<ul style="list-style-type: none"> If this training has been provided, is there evidence that the results have been both effective and sustainable? Do all staff have confidence in the reporting system over time? Is there evidence that the Inclusive Safety Culture needs further support?
Inter-professional Teamwork and Communication			
How effective is the communication between and within teams and across the organisation?	<ul style="list-style-type: none"> Are there organisational and / or cultural barriers inhibiting effective communication? 	TCI can be employed to identify areas that need improvement and to develop inter-professional working (IPW) within and across teams?	<ul style="list-style-type: none"> After review and the implementation of improvement initiatives / protocols, is there evidence of an improvement?
Valuing Strengths			
Are teams committed to the values of an open safety culture within the organisation?	<ul style="list-style-type: none"> Does this include respect, valuing the strengths, roles and responsibilities of their colleagues? Do team members speak up and challenge decisions, even if it involves disagreement? 	Is there now evidence of distributive as well as shared decision making?	<ul style="list-style-type: none"> Do team members feel valued and supported by their colleagues and team leader?
Situational Awareness and Workload			
<p>Who is monitoring the system status and informing the team?</p> <p>Are staffing levels adequate to achieve this?</p>	<ul style="list-style-type: none"> Have teams been adequately trained on Human Error and behaviours under high workload, fatigue and stress? 	With provision of appropriate training and use of the TCI, protocols are established for inter-professional team working so there is always someone to “step back” taking an overview.	Has there been a reduction in the number of incident reports relating to a loss of SA?